

### **REMARKS**

Applicants appreciate the Examiner's thorough consideration provided the present application. Claims 1, 2 and 4-22 are now present in the application. Claims 15-21 are withdrawn. Claim 3 has been cancelled. Claim 22 has been added. Claims 1, 2, 4, 6, 7, 8, 12 and 14 have been amended. Claims 1, 6, 12, 15 and 19 are independent. Reconsideration of this application is respectfully requested.

#### ***I. Priority Under 35 U.S.C. §119***

Applicants thank the Examiner for acknowledging Applicants' claim for foreign priority under 35 U.S.C. §119, and receipt of the certified priority document.

#### ***II. Drawings***

Applicants thank the Examiner for accepting Applicants' drawings. However, Applicants have not received a Notice of Draftsperson's Patent Drawing Review PTO-948 indicating whether or not the formal drawings have been approved by the Draftsperson. Since the drawings have been accepted by the Examiner, Applicants assume that no further action is necessary. Confirmation thereof in the next Office Action is respectfully requested.

#### ***III. Restriction and Election of Species Requirement***

The Examiner has acknowledged Applicants' election of Group I (claims 1-14), and has withdrawn claims 15-21 from further consideration.

#### **IV. Claim Objections**

Claims 6 and 14 have been objected to due to the presence of minor informalities. These objections are respectfully traversed. Applicants have amended claims 6 and 14 to incorporate the changes recommended by the Examiner. Accordingly, these objections have been obviated and/or rendered moot.

#### **V. Claim Rejections Under 35 U.S.C. §112**

Claims 3, 7, 8 and 12 stand rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particular point out and distinctly claim the subject matter which Applicants regard as the invention. This rejection is respectfully traversed.

In light of the foregoing amendments to the specification, Applicants respectfully submit that this rejection has been obviated and/or rendered moot. However, Applicants respectfully submit that the foregoing amendments have been made to merely clarify the claimed invention for the benefit of the Examiner.

Without conceding the propriety of the Examiner's rejection, but merely to timely advance the prosecution of the application, Applicants have incorporated the changes recommended by the Examiner. Applicants submit that the requested changes do not appear to either raise a substantial question of the patentability of the claimed invention nor do they narrow the scope of the claimed invention.

#### **VI. Claim Rejections Under 35 U.S.C. § 102**

Claims 1-3, 6-9 and 12 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Kim et al., U.S. Patent No. 6,091,466 ("Kim"). Claims 1, 4 and 5 stand rejected under 35 U.S.C. § 102(e) as being anticipated by Akamatsu et al., U.S. Patent No. 6,414,730. Claims 6 and

10-14 stand rejected under 35 U.S.C. § 102(e) as being anticipated by Kim, U.S. Pub. No. US2001/0019376 A1 ("376 Publication"). These rejections are respectfully traversed.

A complete discussion of the Examiner's rejection is set forth in the Office Action, and is not being repeated here.

In light of the foregoing amendments to the claims, Applicants respectfully submit that these rejections have been obviated and/or rendered moot. While not conceding to the Examiner's rejection, but merely to expedite prosecution, as the Examiner will note, independent claim 1 has been amended to recite a combination of elements including "a gate insulation layer formed underneath the passivation layer, wherein the contact hole is defined through the passivation layer and the gate insulation layer," and claims 6 and 12 have been amended to recite a combination of elements including "the semiconductor layer having an end aligned with and directly below an end of the source electrode, the semiconductor layer having an opposite end aligned with and directly below an end of the drain electrode". Applicants respectfully submit that the combinations of elements as set forth in amended independent claims 1, 6 and 12 are not disclosed or suggested by the references relied on by the Examiner.

Kim discloses a liquid crystal display device including a substrate; gate and data lines crossing each other on the substrate; a thin film transistor having a semiconductor layer, ohmic contact layer, and source and drain electrodes; a passivation layer having a contact hole exposing a portion of a side surface of the drain electrode; and a pixel electrode on the passivation layer. However, Kim fails to disclose "a gate insulation layer formed underneath the passivation layer, wherein the contact hole is defined through the passivation layer and the gate insulation layer," as set forth in independent claim 1, and fails to disclose "the semiconductor layer having an end aligned with and directly below an end of the source

electrode, the semiconductor layer having an opposite end aligned with and directly below an end of the drain electrode” as set forth in independent claims 6 and 12. In particular, Kim in FIG. 5F discloses that the left end of the semiconductor layer 133 is not aligned with the left end of the source electrode 121, and that the right end of the semiconductor layer 133 is not aligned with the right end of the drain electrode 131. Since Kim fails to teach each and every limitation of independent claims 1, 6 and 12, Applicants respectfully submit that amended independent claims 1, 6 and 12 are not anticipated by Kim.

With regard to the Examiner’s reliance on Akamatsu, it discloses a liquid crystal display device including a substrate; gate and data lines crossing each other on the substrate; a thin film transistor having a semiconductor layer, and source and drain electrodes; a passivation layer having a contact hole exposing a portion of a side surface of the drain electrode; and a pixel electrode on the passivation layer. However, Akamatsu fails to disclose “a gate insulation layer formed underneath the passivation layer, wherein the contact hole is defined through the passivation layer and the gate insulation layer,” as set forth in independent claim 1, and fails to disclose “the semiconductor layer having an end aligned with and directly below an end of the source electrode, the semiconductor layer having an opposite end aligned with and directly below an end of the drain electrode” as set forth in independent claims 6 and 12. In particular, Akamatsu in FIGs. 5A, 6A and 7A discloses that the left end of the semiconductor layer 54 is not aligned with the left end of the source electrode 58, and that the right end of the semiconductor layer 58 is not aligned with the right end of the drain electrode 59. Since Akamatsu fails to teach each and every limitation of independent claims 1, 6 and 12, Applicants respectfully submit that amended independent claims 1, 6 and 12 are not anticipated by Akamatsu.

With regard to the Examiner's reliance on the '376 Publication, it discloses an active matrix display device including a substrate; gate and data lines crossing each other on the substrate; a thin film transistor having a semiconductor layer, ohmic contact layers, and source and drain electrodes; a passivation layer having a contact hole exposing a portion of a side surface of the drain electrode; and a pixel electrode on the passivation layer. However, the '376 Publication fails to disclose "a gate insulation layer formed underneath the passivation layer, wherein the contact hole is defined through the passivation layer and the gate insulation layer," as set forth in independent claim 1, and fails to disclose "the semiconductor layer having an end aligned with and directly below an end of the source electrode, the semiconductor layer having an opposite end aligned with and directly below an end of the drain electrode" as set forth in independent claims 6 and 12. In particular, the '376 Publication in FIG. 8 discloses that the right end of the semiconductor layer 110 is not aligned with the right end of the drain electrode 170. Since the '376 Publication fails to teach each and every limitation of independent claims 1, 6 and 12, Applicants respectfully submit that amended independent claims 1, 6 and 12 are not anticipated by the '376 Publication.

In addition, claims 2, 4, 5, 7-11, 13 and 14 depend directly from independent claims 1, 6 and 12, respectively, and are therefore allowable based on their respective dependence from independent claims 1, 6 and 12 which are believed to be allowable.

In view of the above remarks, Applicants respectfully submit that claims 1, 2 and 4-14 clearly define the present invention over the references relied on by the Examiner. Accordingly, reconsideration and withdrawal of the rejections under 35 U.S.C. § 102 are respectfully requested.

## **VII. CONCLUSION**

All the stated grounds of rejection have been properly traversed and/or rendered moot. Applicants therefore respectfully request that the Examiner reconsider all presently pending rejections and that they be withdrawn.

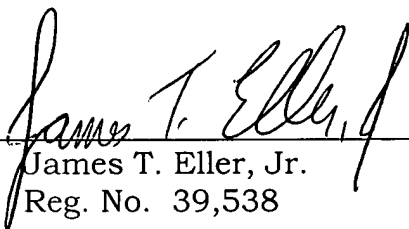
It is believed that a full and complete response has been made to the Office Action, and that as such, the Examiner is respectfully requested to send the application to Issue.

In the event there are any matters remaining in this application, the Examiner is invited to contact James T. Eller, Jr., Registration No. 39,538 at (703) 205-8000 in the Washington, D.C. area.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37 C.F.R. §§1.16 or 1.17; particularly, extension of time fees.

Respectfully submitted,

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